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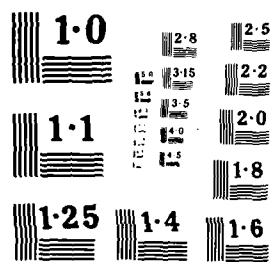
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AMERICAN SOCIETY FOR ENGINEERING EDUCATION  
1985 NAVY/ASEE SUMMER FACULTY RESEARCH PROGRAM  
CONTRACT N00014-83-C-0039

FINAL REPORT

Submitted & Prepared By:  
Charles H. Carter  
Acting Director, Projects and Federal Relations

Date of Report:  
May 15, 1986



This document has been approved  
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AMERICAN SOCIETY FOR ENGINEERING EDUCATION  
1985 NAVY/ASEE SUMMER FACULTY RESEARCH PROGRAM

Contract N00014-83-C-0039

Contract Period: 1 October 1984 - 30 September 1985

FINAL REPORT

Submitted & Prepared By: Charles H. Carter  
Acting Director, Projects and Federal Relations

Date Prepared: May 15, 1986

INTRODUCTION

During the summer of 1985, 159 engineering and science faculty members from 110 universities and colleges located in 39 states and Puerto Rico conducted research at 15 Navy research and development centers. This brought to 591 the number of such participants since the program started in 1979. During these seven years, ASEE has administered the summer faculty programs under a series of contracts from the Office of Naval Research.

Since 1984, the program has been managed for ASEE by John Lisack, Jr., Director of Membership, Projects and Federal Relations. The scientific officer designated by ONR to monitor the program for the Navy has been Dr. Robert L. Sternberg, ONR - Boston Detachment.

Copies of the final report are being sent to those designated in the contract to receive reports which are not technical reports as follows:

<u>ADDRESSEE</u>	<u>DODADD Code</u>	<u>No. of Copies</u>
Scientific Officer (Dr. Robert L. Sternberg)	N00014	1*
Administrative Contract Officer	S2101A	1*

\*unclassified/unlimited

On an informal basis copies are also being sent to Dr. Robert Ryan, the original contract Scientific Officer, to the summer faculty program manager at each of the fifteen participating laboratories and to members of ASEE's Summer Faculty Program Committee and Projects Board.

# CONTRACT HISTORY

The basic contract through Modification P00005 provided \$307,480.00 for 109 ten (10) week awards for the 1983 program. Modification P00006 assigned administrative responsibility of this contract to DCAA.

Modifications P00007 through P00013 authorized \$989,588.00 for 122 ten (10) week awards for the 1984 program. Modification P00014 through P00021 authorized \$1,240,880.00 in new funds and \$50,000.00 in unused funds from the 1984 program for a total funding of 161 fellowships. Of the funded fellowships, 159 participants utilized 159.4 ten week fellowships. NADC, NAMRL, NRL, NSRDC, and NSWC did not utilize 28 weeks of the authorized number of 10 week fellowships. Twelve of the unused 28 weeks of fellowships were used to support weeks of participants at NOSC and NUSC. This leaves 16 weeks of fellowships authorized but not used in 1985.

## FUNDING SOURCE

<u>Proposed</u>		<u>Actual</u>				
<u>Center</u>	<u>Funded By</u>	<u>Participants/# of Weeks</u>				
	<u>ONR</u>	<u>Center</u>	<u>Full-Time</u>	<u>Part-Time</u>	<u>Extended</u>	<u>Totals</u>
NADC	4	11	13/130	---	1/12	14/142
NAMRL	3	4	6/60	1/3	---	7/63
NCSC	4	0	4/40	---	---	4/40
NMRI	4	1	5/50	---	---	5/50
NORDA	3	0	3/30	---	---	3/30
NOSC	5	5	10/100	1/6	---	11/160
NPRDC	5	7	10/100	1/8	1/12	12/120
NRL	14	29	41/410	2/17	---	43/427
NSRDC	5	3	11/110	2/13	---	13/123
NSWC	5	6	10/100	1/7	---	11/107
NUSC	6	18	6/160	---	5/86	22/246
NWC	4	3	5/50	1/5	1/15	7/70
NSMRL	3	0	3/30	---	---	3/30
NTEC	2	1	3/30	---	---	3/30
NBL	1	0	1/10	---	---	1/10
TOTALS	68*	93	104/1410	9/59	9/125	159/1594

NOTES: \* Includes 10 minority appointments and 6 appointments using carry over funds from 1984 contract.

As noted in the table above, NAMRL, NOSC, NPRDC, NRL, NSRDC, NSWC, and NWC supported Fellows for less than full time and extensions were granted to NADC, NPRDC, NUSC and NWC utilizing funds either saved from the less than ten week participants or provided for in the contract.

<u>Center</u>	<u>Less than 10 weeks</u>	<u>Extended beyond 10 weeks</u>
NADC		Miskovsky 2 weeks
NWC	Gruber 5 weeks	Vanderah 5 weeks
NANRL	Senter 7 weeks	
NSRDC	Baerlack 3 weeks	
	Mitchiner 4 weeks	
WOSC	Penchina 4 weeks	
NPRDC	Peterson 2 weeks	Thomas 2 weeks
NSWC	Vassos 3 weeks	
WUSC		Conte 3 weeks
		Leon 5 weeks
		Madych 5 weeks
		Morrison 3 weeks
		Roxin 5 weeks
		Verma 5 weeks
NRL	Blaisdell 2 weeks	
	Hoganson 1 week	
Total	31 weeks	35 weeks*

\* The four weeks were provided from an unused 10 week fellowship.

One hundred and fifty-nine (159) participants utilized 159.4 full-time fellowships. The contract provided funds for 155 new fellowships. Six (6) additional fellowships were authorized from prior year unused funds remaining in the contract.

The original proposal requested \$1,207,037.00 for 150 fellowships of which \$50,000.00 in 1984 funds would be used and \$1,157,037.00 in new funds would be provided. Later in the year, an additional \$83,343.00 was provided for eleven more fellowships. Therefore, the 1985 program was authorized at a total cost of \$1,290,880.00 for 161 ten (10) week fellowships. Payments to ASEE were made on a cash reimbursement basis as follows:

<u>Vo. #</u>	<u>Inv. #</u>	<u>Date</u>	<u>Date Paid</u>	<u>Amount</u>
15	52359	02/08/85	03/04/85	\$ 15,811.68
16	52630	03/25/85	04/11/85	11,405.05
17	52852	04/23/85	05/10/85	13,123.13
18	53217	05/30/85	06/02/85	17,723.54
19	53248	06/06/85	07/05/85	262,559.24
20	53379	07/10/85	08/08/85	348,422.34
21	53471	08/19/85	10/25/85	336,211.65
22	53592	09/20/85	10/25/85	160,200.42
23	53896	12/05/85	---	68,680.33
Total				\$1,234,137.31



## FINANCIAL REPORT

The revised Ninth Interim Financial Statement is Attachment A. Except for 31 final stipend payments of \$200.00 yet to be paid upon submission of final technical abstracts by participants, and a few late participant travel claims, this report covers the expenses for the 1985 program. The unliquidated obligations should not exceed \$16,000.00. Thus, the estimated cost of the 1985 program is \$1,250,897.43. The contract authorized expenditure of \$1,290,880.00. The estimated savings of \$39,983.00 red from the following:

- a) Funding was based on 1,610 participant-weeks, however, 1,594 weeks were filled. This resulted in an underrun of \$10,400.00.
- b) Total administrative expenses for 161 participants was \$123,920.31 in the proposal. Actually, the administrative expenses for the 159 participants was \$120,115.89 for an underrun of \$3,804.42
- c) Provision in the budget for travel and per diem for preprogram visit and for the summer was estimated at \$800.00 per participant for 161 participants or \$128,800.00. Through October 31, 1985, participant travel and per diem reimbursed amounted to \$93,021.42 with approximately \$10,000.00 worth of travel yet to be claimed. Provided that this amount is fully claimed, average travel reimbursement costs will be \$647.00 and \$25,778.58 less than budget will be spent.

Average travel had been \$625.00 in 1981, \$593.00 in 1982, \$540.00 in 1983 and \$552.00 in 1984 per participant. This substantial underrun resulted from the fact that fewer than the expected number of participants made preprogram visits. Also, an increasing number of participants seem to be selected from among applicants within commuting distance of the laboratories. They claimed little or no travel reimbursement.

Tabulated below are the comparative expenses for all seven years of the Navy Summer Faculty Program using estimates based on this report for 1985.

#### YEARLY COMPARISONS

<u>Program</u>	<u>Total Expense</u>	<u>Direct &amp; Ind. Admin. Expense</u>	<u>No. of Part.</u>	<u>Cost Per Part.</u>	<u>Admin. Cost Per Part.</u>
1979	\$ 96,696	\$ 25,357 (27.3%)	16	\$6,231	\$1,678
1980	160,622	32,342 (20.1%)	26	6,177	1,243
1981	338,554	38,413 (11.4%)	59	5,738	651
1982	650,888	62,754 ( 9.6%)	97	6,710	647
1983	767,000	62,790* ( 8.0%)	111	6,909	565
1984	941,126	74,112** (8.0%)	122	7,714	607
1985	\$1,250,897	\$117,457*** (9.0%)	159	\$7,867	\$ 738

(\* This includes a management fee of \$14,380)

(\*\* This includes a management fee of \$14,000)

(\*\*\*This includes a management fee of \$14,500)

With about \$6,200 yet to be paid, \$1,021,000 has been disbursed as stipends to participants by October 31, 1985.

Preparation for the 1985 program included printing and distribution during late October of 1984 of a combined announcement and application form and a program poster. Mailing labels were obtained as follows:

#### Flyers:

American Institute of Biological Sciences	6,523 members
American Institute of Physics	1,580 dept. heads
American Chemical Society	1,518 dept. heads
American Mathematical Society	1,247 dept. heads
American Society for Engineering Education	280 deans

<b>Total</b>	<b>11,148 Labels</b>
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#### Posters:

American Association for Advancement of Science	24,519 members
American Society for Engineering Education	8,681 members
Subscribers to DOE Insider Newsletter	5,373 subscribers
Human Factors Society	2,962 members
National Council of University Research Admin.	1,691 members
American Psychological Association	1,128 members

<b>Total</b>	<b>44,854 Labels</b>
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Copies of the flyer and poster are Attachments B1 and B2.

#### 1985 PROGRAM APPLICANTS AND PARTICIPANTS

By the February 1, 1985, deadline, 482 applications had been received. An analysis of the distribution of both applicants and participants including a breakdown of the applicants by sex, race and previous summer faculty program participation is Attachment C. One hundred and fifty-nine (159) or 33% were appointed. This is about one in three which is higher than the previous year.

The applications were sent to the laboratories chosen by the applicants for review and recommendation. The designated Navy program administrator at each laboratory coordinated the review process after which he submitted a priority list to ASEE. The ASEE program office offered appointments by telephone based on these lists and, upon verbal acceptance, followed up with a letter of appointment. (Attachment D) Each appointee was asked to sign and return a formal acceptance. (Attachment E)

#### APPOINTMENT ANALYSIS

<u>R&amp;D Center</u>	<u>Applicants</u>	<u>Offers</u>	<u>Acceptances</u>
NADC	36	24	14
NAMRL	17	8	7
NCSC	14	6	4
NMRI	42	5	5
NORDA	20	5	3
NOSC	36	18	11
NPRDC	59	13	12
NRL	114	69	43
NSRDC	37	19	13
NSWC	28	20	11
NUSC	32	26	22
NWC	33	10	7
NTEC	3	3	3
NBL	1	1	1
NSMRL	10	3	3
TOTAL	482	230 (47.7%)	159 (32.0%)

Thus, after reviewing the applications, the laboratories identified the applicants having talents that might well serve their research activities. It took 230 offers to gain 159 acceptances. To put it another way, 4 out of 5 (actually 69%) accepted appointments when offered.

Based on the numbers in Attachment C, 7% of the applicants were female. Twenty-six percent of the female applicants or one out of four were appointed compared to one out of three for all applicants.

The 37 blacks who applied constituted 7% of the applicants and the 12 who were appointed constituted 7% of the participants. One out of three blacks who applied or 32% were appointed compared to one out of three of all applicants.

The Oriental/Asian component of 55 constituted 11% of the applicants. The 14 appointed were 3% of all participants and 25% of the Oriental/Asian applicants.

Finally, 140 or 29% of the applicants indicated on their application forms that they had participated previously in summer faculty programs sponsored by the Navy, NASA, or DOE. Seventy or 48% of the appointments went to this group which constituted 16% of the applicants. A comment on these statistics is included in the conclusions and recommendations.

Attachment F is a list of the 159 participants showing their institutional addresses.

Attachment G lists by states the institutions represented by applicants and participants.

Attachment H is an analysis of applicants and participants by laboratories, academic rank, age and highest degree. Both applicants and participants were about evenly divided among the professorial ranks. Ninety-seven percent of applicants and 91% of the participants held doctoral degrees. The average age of both applicants and participants was just over 42 years. The youngest applicant was 25 and the oldest 78. The youngest participant was 25 and the oldest was 78.

Attachment I is a matrix showing how both applicants and participants were distributed by discipline among the fifteen laboratories.

#### PROGRAM EVALUATION QUESTIONNAIRE

At the time this report was prepared, 142 of the 159 participants had returned evaluation questionnaires. The results are summarized in Attachment J which summarizes all substantive critical comments included in the questionnaires of the respondents.

One hundred and nineteen or 84% felt that they had been engaged effectively in research of importance to the mission of their laboratories and the Navy.

Only twenty-three or 16% felt that they had been ineffective. Judging from their comments, this resulted from failure of their laboratory colleagues to take their involvement seriously or to take advantage of their special competencies.

One hundred and twenty-eight (90%) participants considered it either "very likely" or "likely" that their summer experience would be the basis for continuing research of interest to the Navy and all but one of the participants expected to maintain relations with their professional peers in the laboratories.

All but three of the respondents thought that the summer program had enhanced their research interests and capabilities and all would recommend the program to their faculty colleagues.

The questionnaire results show that the summer program experience will influence the respondents' teaching in one or more of five ways but mostly by integrating new information into their courses and by sharing research experience.

Respondents learned of the program mostly by receiving the announcement in the mail or by communication from colleagues.

Of the respondents who had applied simultaneously to the DOE, NASA and Air Force summer programs, 24 were offered appointments but declined them in favor of the Navy program.

All but three respondents mixed with and learned of the research of at least a few laboratory researchers. The comments, as in past years, include a few criticisms that the laboratories did not make enough effort to familiarize the participants with research and researchers outside their specific assignment.

ASEE was praised for timely payment of stipends but was criticized by one respondent for late payment of travel reimbursements.

Of the 15 respondents who would be unwilling to return, most said it was because the stipend was not high enough compared to other summer opportunities.

A continuing deficiency in the administration of the program is the failure of the laboratories to provide information in a systematic way to participants about submission of proposals to continue research at their home institutions. This is reflected in the 66 respondents who said they received no such information.

The problems posed by security clearance have decreased steadily but nine respondents still reported the security requirements as an obstacle to their research.

Based on the responses of the 142 participants the program continues to provide them with a professionally rewarding experience. Their effectiveness in advancing Navy research should be assessed by responsible Navy officials.

Attachment J shows the nine month salary of 141 of 142 of the respondents to the questionnaire. The average salary was \$31,509 for 9 months or \$875 weekly and the median was \$30,600 for 9 months or \$850 weekly. The lowest salary was \$12,750 for 9 months and the highest was \$60,000 for 9 months. Only 24 individuals or 16% had a weekly salary of less than \$650. It is evident that the majority of individuals are taking a financial loss in order to participate in this program.

#### ASEE SUMMER FACULTY PROGRAM COMMITTEE

The ASEE Summer Faculty program committee held its annual meeting on October 3, 1985 at Lewis Research Center in Cleveland Ohio. The Case Western Reserve University served as host. Program directors for NASA reported on their 1985 programs and plans for 1986. John Lisack, Jr. reported on the DOE program.

The committee recommended that coordinating visitation teams consisting of members of the committee and the ASEE Projects Board try to visit the centers in 1986. This will be discussed with the Projects Board and appropriate action taken.

The committee voted unanimously to increase the basic stipend level to \$7,000.00 per ten (10) week appointment during the 1986 program. O.R. will initiate a three-tiered stipend for faculty during 1986 in an effort to attract some experienced researchers from larger research-oriented Universities.

Minutes of the meeting of the committee are Attachment K. The letter of appointment showing the makeup of the committee is Attachment L.

#### FINANCIAL MANAGEMENT

The preliminary final financial statement is Attachment A. Monies received from the Navy were credited to ASEE account number 3407. Provisional indirect cost rate applied to direct costs exclusive of participant stipends and travel was 39.73%. A final rate will be negotiated and used in the final financial statement.

Stipends of \$650.00 per week were paid in four installments.

- \$2,100.00 at the beginning
- \$2,100.00 after 4 weeks
- \$2,100.00 after 9 weeks
- \$ 200.00 upon submission of abstract or research summary.

Withholding payment of the final \$200.00 of the stipend has proven relatively effective in motivating participants to submit promptly their final report in the form of a technical abstract or research summary.

Invoices were submitted to and paid by the Navy as indicated in Section 2 of this report.

## CONCLUSIONS AND RECOMMENDATIONS

ASEE continues to value its role in seeing that these programs are conducted for the mutual benefit of both the participant and the sponsoring agencies.

This past summer has seen a proliferation of special arrangements for particular faculty members to conduct research for periods greater or less than the specified ten weeks. While providing this flexibility to meet the desires of the laboratories, ASEE has been faced with increasingly complicated administrative arrangements. The ASEE Summer Faculty Committee is on record that ten weeks provides participants with a reasonable opportunity to achieve significant research results. Anything less is objected to as not compatible with the most effective use of the summer opportunities. ASEE is agreeable to a shorter than ten week appointment in particular cases only if the Navy laboratories involved insist that such an appointment will further their research. Laboratories should be encouraged to recommend for appointment only those applicants available for a full, uninterrupted ten weeks.

ASEE has no way of knowing what emphasis is being placed on selection of racial minority applicants during the internal laboratory selection process. Attachment C shows that only 12 of the 37 black applicants were selected by the laboratories. There was at least one black applicant to each of ten of the fifteen laboratories. Although 37 black applicants out of 482 does not seem like a very high number, it represents the best efforts of ASEE to encourage applications from a relatively small pool of black engineering and science faculty members. Encouraging the Navy laboratories to provide opportunities should be more vigorously pursued by the Navy.

In an effort to recruit more black participants, Dr. Francis Graham, Hampton Institute, was hired as a consultant to encourage and promote black applicants for this program. Through the use of faculty and administrative heads of predominantly Black Colleges and Universities, contacts were made in all of the research areas listed in the announcement as possible opportunities for summer employment for qualified blacks. All applicants that applied last year were encouraged to reapply this year. A personal letter was sent to the participants inquiring if they would be interested in participating in the program next year and all responded that they would.

The greatest number of applications came from physicists, mathematicians and chemists followed by electrical and mechanical engineers. Total science applicants outnumber engineers by almost 2.5 to one. These ratios are about the same as in previous years.

No conclusion is drawn from this other than as a representative of the engineering education community, ASEE would like to see more engineering faculty appointed.

Once again, over half of the respondents to ASEE's evaluation questionnaire indicated that they had not received any guidance from their laboratory about submission of proposals for continuation of their research at their home institution. This seems to disavow the announced objectives of the program.

In the comments, one participant who had been in an Air Force summer program wrote approvingly of the Air Force's award of mini-grants based on proposals submitted by summer faculty participants. Upwards of 60% of participants apply and most receive grants of about \$10,000.00 for the following academic year and summer. The Navy might well consider some such program to perpetuate its research relationship with summer program participants.

Based on both formal and informal comments from participants, it seems obvious that despite seven summers of operation the purposes of the program are not fully appreciated by many of the laboratory personnel who receive the summer participants. As part of a seven year review and evaluation of the program which ASEE's committee strongly recommends, the director of that study could be asked to educate all whom he might contact in connection with it about the program, what participants expect and how they should be treated. This educational function would be restricted to the people and places revealed in the study to the laboratory under mistaken notions of what it's all about.

At its October 1985 meeting the ASEE committee agreed that the Navy program had proven well worthwhile for participating faculty members and the Navy should be encouraged to expand it.



AMERICAN SOCIETY FOR ENGINEERING EDUCATION  
 1985 NAVY/ASEE SUMMER FACULTY RESEARCH PROGRAM  
 NINTH INTERIM FINANCIAL REPORT

ADMINISTRATIVE EXPENSE	TOTAL 10/1/84-9/30/85	TOTAL 10/1/85-10/31/85	TOTAL 10/1/84-10/31-85
SALARIES	33,980.03	2,270.76	36,250.79
TEMPORARY SALARIES	2,297.00	0.00	2,297.00
BENEFITS	5,527.84	573.14	6,100.98
POSTAL SERVICE	831.08	0.00	831.08
TELEPHONE	662.49	0.00	662.49
EXPRESS & FREIGHT	113.03	0.00	113.03
SUPPLIES	3,829.77	0.00	3,829.77
PUBLICATIONS & BOOKS	203.86	5.45	209.31
ACCOUNTANTS FEES	275.00	0.00	275.00
CONSULTANT	425.00	0.00	425.00
MACHINE RENTAL	361.00	0.00	361.00
WORD PROCESSING	161.69	0.00	161.69
MISC. EXPENSE	1.60	0.00	1.60
DATA PROCESSING	9,555.84	0.00	9,555.84
PRINTING	4,177.89	0.00	4,177.89
TYPESETTING	679.41	0.00	679.41
GRAPHICS	5.00	0.00	5.00
DUPLICATING	115.04	0.00	115.04
MAIL HOUSE CHARGE	309.80	0.00	309.80
MAILING LABELS	1,127.36	0.00	1,127.36
MAIL HOUSE POSTAGE	756.51	0.00	756.51
TRAVEL	1,329.85	0.00	1,329.85
REGISTRATION FEES	111.99	0.00	111.99
COMMITTEE TRAVEL	649.04	0.00	649.04
MEETING EXPENSE	265.04	0.00	265.04
TOTAL DIRECT EXPENSE	67,752.16	2,849.35	70,601.51
INDIRECT @ 39.73 %	26,917.93	1,132.05	28,049.98
GRANTS & CONTRACTS	4,414.40	0.00	4,414.40
TOTAL ADMIN EXPENSE	\$99,084.49	\$3,981.40	\$103,065.89
PARTICIPANT EXPENSE			
STIPENDS	1,018,700.00	2,300.00	1,021,000
TRAVEL	93,021.42	0.00	93,021.42
TOTAL PARTICIPANT EXPENSE	\$1,111,721.42	\$2,300.00	\$1,114,021.42
TOTAL OPERATING EXPENSE	1,210,805.91	6,281.40	1,217,087.31
FIXED FEE	14,500.00	0.00	14,500.00
FEE/PARTIAL/EXTENDED/APPT	2,550.00	0.00	2,550.00
TOTAL PROGRAM EXPENSE	\$1,227,855.91	\$6,281.40	\$1,234,137.31

# Summer Faculty Programs 1985

For U.S. citizens with teaching or research appointments in universities or colleges,  
preferably with two or more years of experience.



National Aeronautics  
& Space Administration



United States  
Navy



Department of  
Energy



American Society  
for Engineering Education

**INTRODUCTION:** NASA, the Office of Naval Research and the Department of Energy will sponsor 1985 Summer Faculty Research Programs at research and development installations listed below.

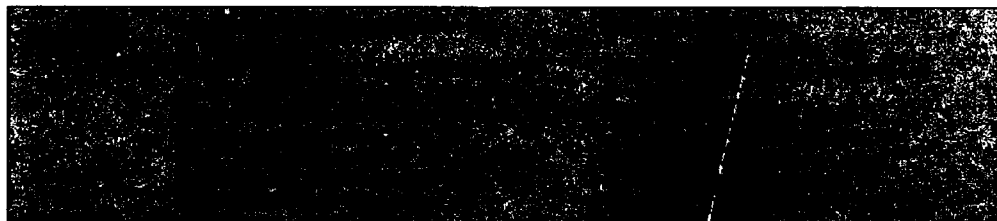
**APPOINTMENTS:** Participants must be U.S. citizens, and for Navy appointments either holding or eligible for a Department of Defense Security Clearance of SECRET. A minimum of two years' experience in teaching or research is preferred. About 400 appointments will be made to teaching or research faculty of colleges and universities.

**OBJECTIVES:** (1) To engage university faculty members in the research problems of the various

laboratories. (2) To develop the basis for continuing research of interest to NASA, the Navy and DOE at the faculty members' institutions. (3) To establish continuing relations among faculty members and their professional peers in NASA, the Navy and DOE. (4) To enhance the research interests and capabilities of science and engineering faculty members.

**TERMS:** Stipends are \$650 per week for ten weeks. A travel allowance will be paid for travel to and from the research site, and for a preprogram visit also.

**DURATION:** Ten weeks from June 3 to August 9, 1985. The dates may be changed to accommodate appointees.



**For application forms and information contact:**

Summer Faculty Programs  
American Society for Engineering Education  
11 Dupont Circle, Suite 200  
Washington, D.C. 20036

**ONLY U.S. CITIZENS ARE ELIGIBLE**

APPLICATION DEADLINE: February 1, 1985  
OFFERS OF APPOINTMENT: After March 1, 1985  
NASA/NAVY/DOE/ASEE ARE EQUAL  
OPPORTUNITY EMPLOYERS

## ATTACHMENT C

## American Society for Engineering Education

## 1985 Navy Summer Faculty Research Program

## Disctibution by Sex, Race and Previous SPF Participation

Center	All Appl. Total	Female	Black	Hisp.	Ind.	Orn.	Prev. SPF
NADC	36-14	3-0	0-0	1-0	1-0	4-1	14
NAMRL	17- 7	1-0	1-0	1-0	1-0	1-1	8
NCSC	14- 4	2-0	1-1	1-1	0-0	1-0	4
NMRI	42- 5	1-0	5-2	0-0	1-0	4-0	7
NORDA	20- 3	3-0	4-1	0-0	0-0	1-0	4
NOSC	36-11	3-0	3-1	0-0	0-0	5-0	14
NPRDC	59-12	8-3	4-0	2-0	0-0	3-0	12
NRL	114-43	5-2	14-5	3-1	0-0	13-3	35
NSRDC	37-13	2-1	1-1	0-0	0-0	7-3	10
NSWC	28-11	2-0	0-0	0-0	0-0	4-1	10
NUSC	32-22	1-1	0-0	0-0	1-0	6-4	12
NWC	33- 7	1-0	3-1	1-0	0-0	6-1	10
NTEC	3- 3	1-1	0-0	0-0	0-0	0-0	0
NBL	1- 1	0-0	0-0	0-0	0-0	0-0	0
NSMRL	10- 3	1-1	1-0	0-0	0-0	0-0	0
Totals	482-159	34-9	37-12	9-2	3-0	55-14	140



**American Society for  
Engineering Education**

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eleven dupont circle, washington, d.c. 20036

(202) 293-7080

SAMPLE LETTER OF APPOINTMENT

March 13, 1985

Assoc. Prof. Isaac D. Abella  
Physics Department  
University of Chicago  
5734 South Ellis Avenue (BGS-443)  
Chicago, Illinois 60637

Dear Prof. Abella:

I am pleased to confirm your appointment to a 1985 summer faculty research associateship in the Navy/ASEE Summer Faculty Research Program.

Under the terms of the appointment you will receive \$6,500 for ten weeks. You will be paid \$2,100 after you arrive. \$2,100 during the fifth week, \$2,100 during the ninth week and \$200 upon submission of a brief report on your research accomplishments during the summer and an evaluation questionnaire. All stipends will be paid directly to you by ASEE. The stipend for this program is taxable.

The Office of Naval Research has authorized funds for you to visit the Navy center at which you will carry out your research sometime before the beginning of your ten-week appointment. The dates for this preprogram visit should be decided by you and your colleague at the Navy research center. Your travel to and from the research site for the 10-week summer period will also be reimbursed. You will be able to claim reimbursement for the economy class (Y-class) airfare between the airport nearest your residence and the airport nearest your research site, and during your pre-program visit meals and lodging not to exceed \$75 per day for not more than two days. If you drive your personal car to the research site to have it available during the summer, we will reimburse you at the rate of 20 cents per mile up to a total not to exceed the economy class airfare available at the time. We cannot cover the added cost of food and lodging while you are on the way to and from the site for your 10-week research period. Enclosed are travel forms which you can submit to ASEE to claim reimbursement for your expenses (allow four weeks for processing of claims). If necessary, we can provide you with a travel advance on request, but ASEE must receive requests for travel advances at least 8 working days prior to your date of departure.

You will be responsible for obtaining and paying for whatever housing you may require. The Navy center may be able to assist you in finding a suitable place to stay during your ten-week sojourn.

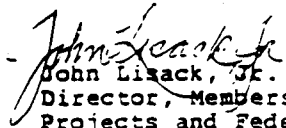
Although June 3 is the announced starting date, we are aware that this may not be compatible with the increasingly varied university calendars. Therefore, if necessary you may arrange a more convenient starting date. Any Monday is acceptable to ASEE, but the starting date should also be acceptable to your colleague at the Navy research center. We do insist that ten work weeks be devoted to the summer research. As soon as you decide on a starting date, please let me know.

Your file and pay record will be maintained at ASEE headquarters and questions concerning your stipends and travel reimbursements should be directed to ASEE. Should you have questions related to your research activities at the center, you should address them to your colleague there. Your colleague or the laboratory's summer program coordinator may be contacting you very soon to obtain information needed for security clearance. Because the clearance procedure is time consuming, please respond promptly so that it can be completed prior to the time you arrive for the summer. Even though not all research assignments require clearance, some Navy labs may deny access to certain areas (for example, the library) to uncleared participants or require them to get a guest pass every day.

To complete our official record, we would appreciate your signing and returning the enclosed acceptance form.

Feedback from participants and from laboratory personnel involved in the Navy-ASEE Summer Faculty Program has been uniformly positive since the program began in 1979. I look forward to helping you enjoy a personally and professionally rewarding experience.

Sincerely,

  
John Lisack, Jr.  
Director, Membership,  
Projects and Federal Relations

Enclosures

cc: R. Sternberg  
Program Managers

AMERICAN SOCIETY FOR ENGINEERING EDUCATION  
Navy/ASEE Summer Faculty Research Program  
Acceptance of Appointment

NAME: \_\_\_\_\_

I hereby accept appointment to a ten-week research appointment as described in the letter of appointment dated March 13, 1985 from John Lisack, Jr., manager for ASEE of the Navy/ASEE Summer Faculty Research Program. This acceptance acknowledges the terms of the appointment specified in that letter.

Signed \_\_\_\_\_

NOTE: This appointment is not a contract by the Navy or ASEE for your personal services. The role is that of a self-employed professional who has agreed to conduct and report on research of interest both to yourself and the Navy.

The date you propose to start your summer research. This should preferably be on June 3 or a Monday as close to that date as possible:

Date: \_\_\_\_\_

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R. PIEDRAS ,PR 00931

DOUGLAS SPEIGEL  
UNIV OF SOUTH DAKOTA  
PSYCHOLOGY  
VERMILLION ,SD 57069

GHASI VERMA  
UNIV OF RHODE ISLAND  
MATHEMATICS  
214 TYLER HALL  
KINGSTON ,RI 02881

ATTACHMENT F.

JACK STEIN  
PENN ST UNIV-KING OF PRUSSIA  
ELECTRICAL ENGINEERING  
650 S. HENDERSON ROAD  
KING OF PRUSSIA ,PA 19400

ALLEN L. WASSERMAN  
OREGON STATE UNIVERSITY  
PHYSICS  
DEPT. OF PHYSICS  
CORVALLIS ,OR 97331

GEORGE STICKNEY  
UNIV OF MISSOURI-COLUMBIA  
MECHANICAL ENGINEERING  
COLUMBIA ,MO 65211

MARGARET WECHTER  
SOUTHEASTERN MASS UNIV  
CHEMISTRY  
N. DARTMOUNT ,MA 02747

KENNETH STUART  
ISSAQUAH HEALTH RESEARCH INST.  
LIFE SCIENCES NEC  
1595 NW GILMAN BLVD.  
ISSAQUAH ,WA 98027

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JMI ENGRG & MGMT INST-FLINT  
MECHANICAL ENGINEERING  
1700 WEST THIRD AVENUE  
FLINT ,MI 48502

MEENAKSHI SUNDARAM  
UNIV OF NEW HAVEN  
INDUSTRIAL ENGINEERING  
300 ORANGE AVENUE  
WEST HAVEN ,CT 06516

JOHN A. WHITE JOHN A.  
AMERICAN UNIVERSITY  
PHYSICS  
WASHINGTON ,DC 20016

WILLIAM SWIM  
TENNESSEE TECHNOLOGICAL UNIV  
MECHANICAL ENGINEERING  
BOX 5014 TTU  
COOKEVILLE ,TN 68505

JERRY WILLIAMS  
UNIV OF FLORIDA  
ENGINEERING NEC  
DEPT. MAT. SCI. & ENGR'G  
GAINESVILLE ,FL 32611

ATTACHMENT F.

SCOTT TENTO  
UTAH STATE UNIVERSITY  
MATHEMATICS  
MATH DEPT.  
LOGAN ,UT 84322

RONALD WILLIAMS  
OHIO UNIVERSITY-ATHENS  
CHEMISTRY  
DEPT. OF CHEMISTRY  
ATHENS ,OH 45701

MARIE D. THOMAS  
COLLEGE OF MOUNT ST. VINCENT  
PSYCHOLOGY  
DEPT. OF PSYCHOLOGY  
RIVERDALE ,NY 10471

NORMAN WITRIOL  
LOUISIANA TECH UNIVERSITY  
PHYSICS  
P.O. BOX 3169 T.S.  
RUSTON ,LA 71272

CHIN CHEN TING  
UNIV OF HOUSTON  
PHYSICS  
DEPT. OF PHYSICS  
HOUSTON ,TX 77004

WILLIAM JO WOLTERS  
UNIV OF SOUTH CAROLINA  
ELECTRICAL ENGINEERING  
COLUMBIA ,SC 29208

EDMOND TOMASTIK  
UNIV OF CONNECTICUT-STORRS  
MATHEMATICS  
MATH DEPARTMENT  
U-09  
STORRS ,CT 06286

JOHN WORLEY  
ST. NORBERT COLLEGE  
CHEMISTRY  
DEPERE ,WI 54115

CENGIZ TOPAKOGLU  
UNIV OF SOUTH ALABAMA  
MECHANICAL ENGINEERING  
DEPT. OF MECH. ENGR'G  
EGCB 212  
MOBILE ,AL 36688

TUNG LIN WU  
COPPIN STATE COLLEGE  
ENVIRONMENTAL SCIENCES, NEC  
2500 W. NORTH AVENUE  
BALTIMORE ,MD 21216

ATTACHMENT F.

GEORGE TREVINO  
MICHIGAN TECHNOLOGICAL UNIV  
MECHANICAL ENGINEERING  
ME-EM DEPARTMENT  
HOUGHTON ,MI 49931

JOAN WYZKOSKI  
BRADLEY UNIVERSITY  
MATHEMATICS  
PEORIA ,IL 61625

DANIEL TROY  
PURDUE UNIV-HAMMOND  
MATHEMATICS  
2233 171ST STREET  
HAMMOND ,IN 46323

MARK C.K. YANG  
UNIV OF FLORIDA  
MATHEMATICS  
DEPT. OF STATISTICS  
GAINESVILLE ,FL 32611

CHUNG TSUI  
UNIV OF MARYLAND-COLLEGE PARK  
MECHANICAL ENGINEERING  
MECHANICAL ENGINEERING  
COLLEGE PARK ,MD 20742

DAE S. YOUNG  
MICHIGAN TECHNOLOGICAL UNIV  
ENGINEERING TECHNOLOGY  
MINING ENGINEERING DEPT.  
HOUGHTON ,MI 49931

ARNOLD TUBIS  
PURDUE UNIV-WEST LAFAYETTE  
PHYSICS  
WEST LAFAYETTE ,IN 47907

KUNO ZIMMERMANN  
UNIV OF MISSOURI  
ELECTRICAL ENGINEERING  
600 W. MECHANIC  
INDEPENDENCE ,MO 64050

WAYNE TUCKER  
UNIV OF RHODE ISLAND  
OCEANOGRAPHIC ENGINEERING  
LIPPITT HALL  
KINGSTON ,RI 02881

## ATTACHMENT G.

AMERICAN SOCIETY FOR ENGINEERING EDUCATION  
 1985 Summer Faculty Research Program  
 States and Institutions of Applicants/Participants

## Code\*

\*1= Applicant not Accepted  
 \*3= Applicant Declined  
 \*4= Applicant and Participant

State	Institution	Code
AK	UNIV OF ALASKA-FAIRBANKS	1
AL	ALABAMA A & M UNIVERSITY	1
AL	UNIV OF ALABAMA-HUNTSVILLE	1
AL	TUSKEGEE INSTITUTE	1
AL	UNIV OF ALABAMA-HUNTSVILLE	1
AL	AUBURN UNIVERSITY	3
AL	UNIV OF SOUTH ALABAMA	4
AL	UNIV OF SOUTH ALABAMA	4
AL	UNIV OF SOUTH ALABAMA	4
AR	UNIV OF CENTRAL ARKANSAS	1
AR	UNIV OF ARKANSAS-LITTLE ROCK	1
AR	UNIV OF ARKANSAS-LITTLE ROCK	1
AR	JOHN BROWN UNIVERSITY	1
AR	JOHN BROWN UNIVERSITY	1
AZ	UNIV OF ARIZONA	1
AZ	GLENDALE COMMUNITY COLL	1
AZ	CENTRAL ARIZONA COLLEGE	1
AZ	UNIV OF ARIZONA	1
AZ	ARIZONA STATE UNIVERSITY	1
AZ	ARIZONA STATE UNIVERSITY	4
CA	CAL STATE UNIV-FRESNO	1
CA	MESA COLLEGE	1
CA	PACIFIC UNION COLLEGE	1
CA	DIABLO VALL COLL-PLEASNT	1
CA	RIVERSIDE COLLEGE	1
CA	CALIFORNIA POLYTECH STATE UNIV	1
CA	SAN DIEGO STATE UNIV	1
CA	SAN DIEGO STATE UNIV	1

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State	Institution	Code
CA	CAL. ST. UNIV.-SAN BERNARDINO	1
CA	SAN DIEGO MESA COLLEGE	1
CA	CAL STATE UNIV-FULLERTON	1
CA	SAN DIEGO STATE UNIV	1
CA	LONG BEACH CITY COLLEGE	1
CA	AZUSA PACIFIC UNIVERSITY	1
CA	CAL STATE UNIV-FRESNO	3
CA	UNIV OF CALIFORNIA-IRVINE	3
CA	CAL STATE UNIV-FRESNO	3
CA	CAL STATE UNIV-NORTHRIDGE	3
CA	HUMBOLDT STATE UNIVERSITY	4
CA	SAN FRANCISCO STATE UNIV	4
CA	SAN JOSE STATE UNIVERSITY	4
CA	SADDLEBACK COLLEGE	4
CA	UNIV OF SOUTHERN CALIFORNIA	4
CA	CAL STATE UNIV-FULLERTON	4
CA	MENLO COLLEGE	4
CA	SAN DIEGO STATE UNIV	4
CA	NORTHROP UNIVERSITY	4
CO	UNIV OF SOUTHERN COLORADO	1
CO	UNIV OF COLORADO-DENVER	1
CO	WESTERN STATE COLLEGE	1
CO	UNIVERSITY OF NORTH COLORADO	4
CO	COLORADO STATE UNIVERSITY	4
CO	COLORADO SCHOOL OF MINES	4
CT	NORWALK STATE TECH COLL	1
CT	CONNECTICUT COLLEGE	1
CT	BRIDGEPORT ENGINEERING INST	1
CT	MIDDLESEX COMMUNITY COLLEGE	1
CT	SOUTHERN CONNECTICUT UNIV.	4
CT	UNIV OF CONNECTICUT	4
CT	UNIV OF NEW HAVEN	4
CT	UNIV OF NEW HAVEN	4
CT	UNIV OF CONNECTICUT-STORRS	4
DC	HOWARD UNIVERSITY	1
DC	UNIV OF DIST OF COLUMBIA	1
DC	UNIV OF DIST OF COLUMBIA	1
DC	GEORGETOWN UNIV	1
DC	GOVT. OF ETHIOPIA	1



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State	Institution	Code
DC	UNIV OF DIST OF COLUMBIA	1
DC	GEORGE WASHINGTON UNIV	1
DC	AMERICAN UNIVERSITY	1
DC	HOWARD UNIVERSITY	1
DC	HOWARD UNIVERSITY	1
DC	CATHOLIC UNIVERSITY	3
DC	COLLEGE OF THE VIRGIN ISLANDS	3
DC	HOWARD UNIVERSITY	4
DC	AMERICAN UNIVERSITY	4
DC	HOWARD UNIVERSITY	4
DC	GEORGE WASHINGTON UNIV	4
DC	AMERICAN UNIVERSITY	4
DC	HOWARD UNIVERSITY	4
DC	CATHOLIC UNIVERSITY	4
DC	HOWARD UNIVERSITY	4
DC	HOWARD UNIVERSITY	4
DC	CATHOLIC UNIVERSITY	4
DC	GALLAUDET	4
DC	AMERICAN UNIVERSITY	4
DE	DELAWARE STATE COLLEGE	1
DE	UNIV OF DELAWARE	3
FL	UNIV OF MIAMI-CORAL GABLES	1
FL	UNIV OF FLORIDA-GAINESVILLE	1
FL	FLORIDA INST OF TECH	1
FL	BETHUNE-COOKMAN COLLEGE	1
FL	EDWARD WATERS COLLGE	1
FL	INDIAN RIVER COMM. COLL.	1
FL	SEMINOLE COMMUNITY COLL	1
FL	FLORIDA INTERNATIONAL UNIV	1
FL	UNIV OF FLORIDA-GAINESVILLE	1
FL	UNIVERSITY OF SOUTH FLORIDA	1
FL	UNIVERSITY OF CENTRAL FLORIDA	1
FL	TALLAHASSEE COMMUNITY COLLEGE	1
FL	UNIV OF MIAMI-CORAL GABLES	3
FL	UNIV OF WEST FLORIDA	3
FL	MIAMI UNIVERSITY	3
FL	FLORIDA INST OF TECH	4
FL	UNIV OF FLORIDA	4
FL	UNIV OF SOUTH FLORIDA	4

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State	Institution	Code
FL	EMERY-RIDDLE AERONAUTICS UNIV	4
FL	UNIV OF MIAMI-CORAL GABLES	4
FL	FLORIDA INST OF TECH	4
FL	UNIV OF FLORIDA	4
FL	UNIV OF FLORIDA	4
GA	UNIV OF GEORGIA	1
GA	FORT VALLEY STATE COLLEGE	1
GA	ARMSTRONG STATE COLLEGE	1
GA	COLUMBUS COLLEGE	1
GA	ATLANTA JUNIOR COLLEGE	1
GA	TIFT COLLEGE	1
GA	COLUMBUS COLLEGE	1
GA	GEORGIA TECH	3
GA	AUGUSTA COLLEGE	3
GA	MERCER UNIVERSITY	4
GA	PAINE COLLEGE	4
GA	CLARK COLLEGE	4
HI	UNIV OF HAWAII	1
IA	BRIAR CLIFF COLLEGE	1
IA	CENTRAL COLLEGE	1
IA	IOWA STATE UNIVERSITY	1
IA	IOWA STATE UNIVERSITY	1
IA	IOWA STATE UNIVERSITY	1
IA	LORAS COLLEGE	1
IA	WESTMAR COLLEGE	1
IA	UNIV OF IOWA	1
IA	CORNELL UNIVERSITY	1
IA	UNIV OF IOWA	4
IA	CENTRAL COLLEGE	4
ID	RICKS COLLEGE	1
IL	WESTERN ILLINOIS UNIV	1
IL	SO ILLINOIS UNIV-CARBONDALE	1
IL	EASTERN ILLINOIS UNIV	1
IL	SOUTHERN ILLINOIS COLLEGE	1
IL	UNIV OF ILLINOIS-URBANA	1
IL	UNIV OF ILLINOIS-URBANA	1
IL	UNIVERSITY OF ILLINOIS	1
IL	UNIV OF CHICAGO	3
IL	UNIV OF ILLINOIS-URBANA	3

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State	Institution	Code
IL	UNIV OF CHICAGO	4
IL	SOUTHERN ILLINOIS COLLEGE	4
IL	ILLINOIS INST OF TECH	4
IL	BRADLEY UNIVERSITY	4
IN	BALL STATE UNIVERSITY	1
IN	PURDUE UNIV-WEST LAFAYETTE	1
IN	ROSE-HULMAN INST OF TECH	1
IN	ROSE-HULMAN INST OF TECH	1
IN	VALPARAISO TECHNICAL INST	1
IN	BALL STATE UNIVERSITY	1
IN	BALL STATE UNIVERSITY	1
IN	INDIANA UNIVERSITY	1
IN	PURDUE UNIV-INDIANAPOLIS	3
IN	ROSE-HULMAN INST OF TECH	3
IN	PURDUE UNIV-WEST LAFAYETTE	3
IN	ROSE-HULMAN INST OF TECH	4
IN	ST. JOSEPH'S COLLEGE	4
IN	PURDUE UNIV-INDIANAPOLIS	4
IN	PURDUE UNIV-HAMMOND	4
IN	PURDUE UNIV-WEST LAFAYETTE	4
KS	KANSAS STATE UNIV	1
KS	UNIVERSITY OF KANSAS	1
KS	WICHITA STATE UNIVERSITY	1
KS	KANSAS STATE UNIV-MANHATTAN	1
KS	WASHBURN UNIVERSITY	4
KS	KANSAS STATE UNIV-MANHATTAN	4
KS	WICHITA STATE UNIVERSITY	4
KY	KENTUCKY STATE UNIV-FRANKFORT	1
KY	KENTUCKY STATE UNIV-FRANKFORT	1
KY	UNIV OF LOUISVILLE	1
KY	UNIV OF KENTUCKY-LEXINGTON	1
KY	EASTERN KENTUCKY UNIV	3
KY	UNIV OF KENTUCKY-LEXINGTON	4
KY	TRANSYLVANIA UNIVERSITY	4
LA	MCNEESE STATE UNIVERSITY	1
LA	UNIV OF NEW ORLEANS	1
LA	SOUTHERN UNIVERSITY	1
LA	LOUISIANA ST UNIV-BATON ROUGE	1
LA	UNIV OF NEW ORLEANS	1

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State	Institution	Code
LA	SOUTHEASTERN LOUISIANA UNIV	1
LA	LOUISIANA STATE UNIV	3
LA	SOUTHERN UNIVERSITY	3
LA	SOUTHERN UNIVERSITY	3
LA	SOUTHERN UNIVERSITY	3
LA	UNIV OF NEW ORLEANS	4
LA	UNIV OF SOUTHWEST LOUISIANA	4
LA	SOUTHERN UNIVERSITY	4
LA	SOUTHERN UNIVERSITY	4
LA	LOUISIANA TECH UNIVERSITY	4
MA	NORTHEASTERN UNIVERSITY	1
MA	NORTHEASTERN UNIVERSITY	1
MA	NORTHEASTERN UNIVERSITY	1
MA	BOSTON COLLEGE	1
MA	UNIV OF MASSACHUSETTS	4
MA	UNIV OF LOWELL	4
MA	SOUTHEASTERN MASS UNIV	4
MA	SOUTHEASTERN MASS UNIV	4
MA	UNIV OF MASSACHUSETTS	4
MA	UNIV OF LOWELL	4
MA	SOUTHEASTERN MASS UNIV	4
MA	SOUTHEASTERN MASS UNIV	4
MD	BOWIE STATE COLLEGE	1
MD	GOUCHER COLLEGE	1
MD	UNIV OF MARYLAND-COLLEGE PARK	1
MD	BOWIE STATE COLLEGE	1
MD	U.S. NAVAL ACADEMY	1
MD	COLUMBIA UNION COLLEGE	1
MD	MORGAN STATE UNIVERSITY	1
MD	ANNE ARUNDEL COMMUNITY COLLEGE	1
MD	JOHNS HOPKINS UNIV.	3
MD	GOUCHER COLLEGE	3
MD	MORGAN STATE UNIVERSITY	3
MD	ANNE ARUNDEL COMMUNITY COLLEGE	3
MD	JOHNS HOPKINS UNIV.	4
MD	UNIV OF MARYLAND-COLLEGE PARK	4
MD	UNIV OF MARYLAND-COLLEGE PARK	4
MD	COPPIN STATE COLLEGE	4
MI	MICHIGAN STATE UNIVERSITY	1

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State	Institution	Code
MI	CALVIN COLLEGE	1
MI	MID-MICHIGAN COMMUNITY COLLEGE	1
MI	CENTRAL MICHIGAN UNIVERSITY	1
MI	MICHIGAN TECHNOLOGICAL UNIV	1
MI	UNIV OF MICHIGAN-ANN ARBOR	1
MI	GMI ENGRG & MGMT INST-FLINT	1
MI	UNIV OF MICHIGAN-ANN ARBOR	1
MI	MICHIGAN TECHNOLOGICAL UNIV	3
MI	MICHIGAN TECHNOLOGICAL UNIV	4
MI	GMI ENGRG & MGMT INST-FLINT	4
MI	MICHIGAN TECHNOLOGICAL UNIV	4
MN	ST. MARY'S COLLEGE	4
MO	PARK COLLEGE	1
MO	UNIV OF MISSOURI-ROLLA	1
MO	UNIV OF MISSOURI-KANSAS CITY	1
MO	UNIV OF MISSOURI-ST LOUIS	1
MO	UNIV OF MISSOURI-ROLLA	1
MO	TARKIO COLLEGE	1
MO	UNIV OF MISSOURI-ROLLA	1
MO	SOUTHWEST BAPTIST UNIVERSITY	1
MO	MINERAL AREA COLLEGE	1
MO	UNIV OF MISSOURI	4
MO	UNIV OF MISSOURI-ROLLA	4
MO	UNIV OF MISSOURI-KANSAS CITY	4
MO	UNIV OF MISSOURI-COLUMBIA	4
MO	UNIV OF MISSOURI	4
MS	SOUTHERN MISSISSIPPI, UNIV OF	1
MS	RUST COLLEGE	1
MS	UNIV OF MISSISSIPPI	1
MS	UNIV OF SOUTHERN MISSISSIPPI	1
MS	JACKSON COMMUNITY COLLEGE	1
MS	RUST COLLEGE	1
MS	MISSISSIPPI STATE UNIV	3
MS	TOUGALOO COLLEGE	4
MT	MONTANA STATE UNIVERSITY	1
NC	UNIV OF NO CAROLINA-CHARLOTTE	1
NC	NORTH CAROLINA CENTRAL UNIV.	1
NC	NORTH CAROLINA CENTRAL UNIV.	1
NC	UNIV OF NO CAROLINA-CHAPEL HL	1

## ATTACHMENT G.

## Code\*

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State	Institution	Code
NC	NORTH CAROLINA CENTRAL UNIV.	1
NC	NORTH CAROLINA WESLEYAN COLL	1
NC	ELIZABETH CITY STATE UNIVER	1
NC	ST. AUGUSTINE'S COLLEGE	3
ND	NORTH DAKOTA STATE UNIV	1
ND	NORTH DAKOTA STATE UNIV	4
NE	WAYNE STATE UNIVERSITY	1
NE	NEBRASKA WESLEYAN UNIV.	1
NE	KEARNEY STATE COLLEGE	1
NE	UNIVERSITY OF NEBRASKA	1
NH	PLYMOUTH STATE COLLEGE	1
NH	UNIV OF NEW HAMPSHIRE	1
NH	UNIV OF NEW HAMPSHIRE	4
NJ	STEVENS INST OF TECH	1
NJ	RUTGERS UNIVERSITY	1
NJ	MIDDLESEX COUNTY COLLEGE	1
NJ	DREW UNIVERSITY	1
NJ	MONMOUTH COLLEGE	1
NJ	STEVENS INST OF TECH	1
NJ	RUTGERS UNIVERSITY	1
NJ	NEW JERSEY INST OF TECH	1
NJ	STEVENS INST OF TECH	1
NJ	KEAN COLL OF NEW JERSEY	1
NJ	STEVENS INST OF TECH	3
NJ	STEVENS INST OF TECH	3
NJ	RUTGERS UNIVERSITY	3
NJ	RUTGERS UNIVERSITY	4
NM	UNIV OF NEW MEXICO	4
NY	QUEENSBOROUGH COMM COLL	1
NY	PRATT INSTITUTE	1
NY	CITY COLL OF NEW YORK	1
NY	S.U.N.Y. GENESEO	1
NY	MANHATTANVILLE COLLEGE	1
NY	QUEENSBOROUGH COMM COLL	1
NY	COLLEGE OF STATEN ISLAND	1
NY	UTICA COLLEGE	1
NY	ST. LAWRENCE UNIV.	1
NY	WESTCHESTER COMM COLL	1
NY	UTICA COLLEGE	1

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State	Institution	Code
NY	ROSWELL PARK GRADUATE SCHOOL	1
NY	ALBANY COLLEGE OF PHARMACY	1
NY	CITY UNIV OF NEW YORK-NEW YORK	1
NY	MANHATTAN COMMUNITY COLLEGE	1
NY	STATE UNIV. COLLEGE-POTSDAM	1
NY	ROCHESTER INST OF TECHNOLOGY	1
NY	FORDHAM UNIV	1
NY	CLARKSON UNIVERSITY	1
NY	BRONX COMMUNITY COLLEGE-BRONX	3
NY	CLARKSON UNIVERSITY	3
NY	STATE UNIV OF NEW YORK	3
NY	QUEENSBOROUGH COMM COLL	3
NY	STATE UNIV OF NEW YORK	3
NY	MANHATTAN COLLEGE-RIVERDALE	4
NY	COLUMBIA COLLEGE	4
NY	STATE UNIV OF NY-BINGHAMTON	4
NY	MANHATTAN COLLEGE-RIVERDALE	4
NY	DOWLING COLLEGE	4
NY	PLATTSBURG STATE UNIVERSITY	4
NY	ST. UNIV. OF NEW YORK-OSWEGO	4
NY	FORDHAM UNIV	4
NY	SYRACUSE UNIVERSITY	4
NY	COLLEGE OF MOUNT ST. VINCENT	4
OH	UNIV OF CINCINNATI	1
OH	CLEVELAND STATE UNIVERSITY	1
OH	KENYON COLLEGE	1
OH	OHIO STATE UNIV-COLUMBUS	1
OH	CAPITAL UNIVERSITY	1
OH	University of Dayton	3
OH	CEDARVILLE COLLEGE	3
OH	OHIO STATE UNIV-COLUMBUS	4
OH	OHIO STATE UNIV-COLUMBUS	4
OH	UNIV OF CINCINNATI	4
OH	UNIV OF CINCINNATI	4
OH	OHIO UNIVERSITY-ATHENS	4
OK	UNIV OF OKLAHOMA	1
OK	UNIV OF OKLAHOMA	1
OK	UNIV OF OKLAHOMA	1
OK	OKLAHOMA STATE UNIVERSITY	1

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State	Institution	Code
OK	CENTRAL STATE UNIVERSITY	1
OK	UNIV OF OKLAHOMA	3
OK	UNIV OF OKLAHOMA	3
OK	UNIV OF OKLAHOMA	3
OK	UNIV OF OKLAHOMA	3
OK	UNIV OF TULSA	4
OK	UNIV OF TULSA	4
OR	PORTLAND COMMUNITY COLL	1
OR	OREGON INST OF TECHNOLOGY	4
OR	OREGON STATE UNIVERSITY	4
PA	LEHIGH UNIVERSITY	1
PA	CARNEGIE-MELLON UNIVERSITY	1
PA	PENN STATE UNIV-UNIV PK	1
PA	PHILA COLL-TEXTILES/SCI	1
PA	LEBANON VALLEY COLLEGE	1
PA	SAINT FRANCIS COLLEGE	1
PA	PHILADELPHIA COLL-PHARM & SCI.	1
PA	CARNEGIE-MELLON UNIVERSITY	1
PA	PENN STATE UNIV-UNIV PK	1
PA	BEAVER COLLEGE	1
PA	PENN STATE UNIV-DUBOIS	1
PA	ST. NORBERT COLLEGE	1
PA	WIDENER UNIVERSITY	1
PA	VILLANOVA UNIVERSITY	1
PA	INDIANA UNIV OF PENNSYLVANIA	1
PA	WIDENER UNIVERSITY	1
PA	PHILA COLL-TEXTILES/SCI	1
PA	PHILA COLL-TEXTILES/SCI	3
PA	PENN STATE UNIV-OGONTZ CAMPUS	3
PA	DREXEL UNIV	3
PA	PENNSYLVANIA STATE UNIVERSITY	3
PA	DREXEL UNIV	3
PA	UNIV OF PENNSYLVANIA	3
PA	PENNSYLVANIA STATE UNIVERSITY	3
PA	PENNSYLVANIA STATE UNIVERSITY	3
PA	PHILA COLL-TEXTILES/SCI	3
PA	TEMPLE UNIVERSITY	4
PA	DREXEL UNIV	4
PA	LEHIGH UNIVERSITY	4



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State	Institution	Code
PA	SHIPPENSBURG UNIVERSITY	4
PA	LINCOLN UNIVERSITY	4
PA	EDINBORO STATE COLL	4
PA	BEAVER COLLEGE	4
PA	LASALLE UNIVERSITY	4
PA	DREXEL UNIV	4
PA	PENN STATE UNIV-UNIV PK	4
PA	PENN STATE UNIV-OGONTZ	4
PA	PENN STATE UNIV-UNIV PK	4
PA	VILLANOVA UNIVERSITY	4
PA	UNIV OF PITTSBURGH-PITTSBURGH	4
PA	PENN ST UNIV-KING OF PRUSSIA	4
PA	DREXEL UNIV	4
PA	CHATHAM COLLEGE	4
PR	UNIV OF PUERTO RICO-MAYAGUEZ	1
PR	UNIV OF PUERTO RICO-MAYAGUEZ	3
PR	UNIV OF PUERTO RICO-MAYAGUEZ	4
PR	UNIV OF PUERTO RICO-RIO PIED	4
RI	UNIV OF RHODE ISLAND	4
RI	UNIV OF RHODE ISLAND	4
RI	UNIV OF RHODE ISLAND	4
RI	UNIV OF RHODE ISLAND	4
SC	CLAPLIN COLLEGE	1
SC	MIDLANDS TECHNICAL COLLEGE	1
SC	CLEMSON UNIVERSITY	1
SC	THE CITADEL	1
SC	SOUTH CAROLINA STATE COLL	1
SC	UNIV OF SOUTH CAROLINA	3
SC	FURMAN UNIVERSITY	3
SC	CLEMSON UNIVERSITY	3
SC	UNIV OF SOUTH CAROLINA	3
SC	CLEMSON UNIVERSITY	4
SC	WINTHROP COLLEGE	4
SC	UNIV OF SOUTH CAROLINA	4
SD	SOUTH DAKOTA STATE UNIV	1
SD	SO DAK SCH OF MINES/TECH	1
SD	UNIV OF SOUTH DAKOTA	4
TN	LANE COLLEGE	1
TN	UNIVERSITY OF TENNESSEE-MEMPHI	1

## ATTACHMENT G.

## Code\*

\*1= Applicant not Accepted  
 \*3= Applicant Declined  
 \*4= Applicant and Participant

State	Institution	Code
TN	TEXAS A&I UNIV-KINGSVILLE	1
TN	TENNESSEE STATE UNIV	1
TN	TENNESSEE TECHNOLOGICAL UNIV	4
TX	LAMAR UNIVERSITY	1
TX	TEXAS A&M UNIV-COLLEGE STA	1
TX	WAYLAND BAPTIST UNIVERSITY	1
TX	UNIV OF TEXAS-AUSTIN	1
TX	TEXAS A & M UNIVERSITY	1
TX	UNIV OF TEXAS-EL PASO	1
TX	NORTH TEXAS STATE UNIV	1
TX	DEL MAR COLLEGE	1
TX	TEXAS WOMAN'S UNIVERSITY	1
TX	UNIV OF TEXAS-EL PASO	1
TX	TEXAS A&M UNIV-COLLEGE STA	1
TX	SOUTHWEST TEXAS STATE UNIV	3
TX	TEXAS A & M UNIVERSITY	3
TX	UNIV OF TEXAS	3
TX	TEXAS CHRISTIAN UNIV	3
TX	TEXAS TECH UNIVERSITY	4
TX	TEXAS CHRISTIAN UNIV	4
TX	UNIV OF TEXAS-ODESSA	4
TX	UNIV OF HOUSTON	4
UT	UTAH STATE UNIVERSITY	4
VA	NORFOLK STATE UNIVERSITY	1
VA	NORFOLK STATE UNIVERSITY	1
VA	VPI & SU-BLACKSBURG	1
VA	VIRGINIA COMMONWEALTH UNIV	1
VA	GEORGE MASON UNIVERSITY	1
VA	VPI & SU-BLACKSBURG	1
VA	VPI & SU-DULLES	1
VA	VPI & SU-BLACKSBURG	1
VA	NORFOLK STATE UNIVERSITY	1
VA	VPI & SU-BLACKSBURG	1
VA	Hampton-Sydney College	3
VA	HAMPTON INSTITUTE	4
VA	VPI & SU-BLACKSBURG	4
VA	MARY WASHINGTON COLLEGE	4
VA	UNIV OF TENNESSEE-CHATTANOOGA	4
VA	HAMPTON UNIVERSITY	4

## ATTACHMENT G.

## Code\*

\*1= Applicant not Accepted

\*3= Applicant Declined

\*4= Applicant and Participant

State	Institution	Code
VA	NORFOLK STATE UNIVERSITY	4
VA	RANDOLPH-MACON COLLEGE	4
VA	VPI & SU-BLACKSBURG	4
VA	WASHINGTON & LEE UNIVERSITY	4
VT	NORWICH UNIVERSITY	4
WA	WASHINGTON STATE UNIV	1
WA	WESTERN WASHINGTON UNIV	1
WA	WASHINGTON STATE UNIV	1
WA	EASTERN WASHINGTON UNIV	3
WA	GONZAGA UNIVERSITY	4
WA	ISSAQUAH HEALTH RESEARCH INST.	4
WI	UNIV OF WISCONSIN-EAU CLAIRE	1
WI	UNIV OF WISCONSIN-EAU CLAIRE	1
WI	MILWAUKEE SCH OF ENGRG	1
WI	MARQUETTE UNIVERSITY	1
WI	UNIV OF WISCONSIN-PARKSIDE	4
WI	UNIV OF WISCONSIN-PLATTEVILLE	4
WI	UNIV OF WISCONSIN-EAU CLAIRE	4
WI	ST. NORBERT COLLEGE	4
WV	SALEM UNIVERSITY	1
WV	WEST VIRGINIA STATE COLLEGE	1
WV	BLUEFIELD STATE COLLEGE	1
WV	WEST VIRGINIA UNIVERSITY	1
WV	MARSHALL UNIVERSITY	3
WY	UNIV OF WYOMING	1

## 1985 Navy Summer Faculty Research Program

Program Analysis: Distribution of Applicants and Participants by Navy R&D Centers, Academic Rank, Age, and Highest Degree

## A. Distribution of Applicants and Participants among Navy R&amp;D Centers

R&D Center	APPLICANTS		PARTICIPANTS		
	Number	As % of Total Appl.	Number	As % of Total Part.	Part. As % of Appl.
NADC	36	7.5%	14	8.8%	38.9%
NAMRL	17	3.5%	7	4.4%	41.2%
NCSC	14	3.0%	4	2.5%	28.6%
NMRI	42	8.8%	5	3.2%	11.5%
NORDA	20	4.2%	3	1.9%	15.0%
NOSC	36	7.5%	11	6.9%	30.6%
NPRDC	59	12.3%	12	7.6%	20.3%
NRL	114	23.8%	43	27.0%	37.7%
NSRDC	37	7.8%	13	8.2%	35.1%
NSWC	28	5.9%	11	6.9%	39.3%
NUSC	32	6.6%	22	13.8%	68.8%
NWC	33	6.9%	7	4.4%	21.2%
NTEC	3	0.07%	3	1.9%	100.0%
NBL	1	0.03%	1	0.6%	100.0%
NSMRL	10	2.1%	3	1.9%	30.0%
Total	482	100.0%	159	100.0%	33.0%

## B. Distribution by Academic Rank

	APPLICANTS		PARTICIPANTS		
	Number	As % of Total Appl.	Number	As % of Total Part.	Part As % of Appl.
Professor	129	26.8%	49	30.8%	38.0%
Associate Prof.	152	31.5%	55	34.6%	36.2%
Assistant Prof.	149	30.9%	44	27.7%	29.5%
Other	52	10.8%	11	6.9%	21.1%

C. Distribution by Age

	APPLICANTS	PARTICIPANTS
Average	41.96	42.1
Median	51.45	51.5
Youngest	25	25
Oldest	78	78

D. Distribution by Highest Degrees

	APPLICANTS		PARTICIPANTS		
	Number	As % of Total Appi.	Number	As % of Total Part.	Part. as % of Appi.
Ph.D	417	86.5%	144	90.5%	34.5%
MS	60	12.5%	15	9.5%	25.0%
BS	4	0.8%	0	0.0%	0.0%
Other	1	0.2%	0	0.0%	0.0%
Total	482	100.0%	159	100.0%	33.0%

AMERICAN SOCIETY FOR ENGINEERING EDUCATION  
1985 NAVY SUMMER FACULTY RESEARCH PROGRAM  
DISTRIBUTION BY DISCIPLINES OF APPLICANTS / PARTICIPANTS

APP/PAR	DISCIPLINES	NADC	NAMRL	NARI	NCSC	NORDA	NSC	NPRDC	NRL	NSMRL	NSRDC	NSVC	NUSC	NWC	NBL	NTEC
	PHYSICAL SCI															
1/1	ASTRONOMY	0/0	0/0	0/0	0/0	0/0	0/0	0/0	1/1	0/0	0/0	0/0	0/0	0/0	0/0	0/0
65/17	CHEMISTRY	4/1	0/0	11/1	0/0	3/0	4/0	0/0	25/10	0/0	3/1	3/1	2/1	10/2	0/0	0/0
80/31	PHYSICS	7/5	0/0	3/1	1/0	2/1	8/3	3/0	32/11	0/0	2/1	7/3	8/3	7/3	0/0	0/0
17/4	PHYSICAL SCI/NEC	4/1	1/0	1/0	1/1	0/0	0/0	1/0	5/0	1/1	0/0	2/0	1/1	0/0	0/0	0/0
	MATH/COMP SCI															
62/26	MATH	5/2	1/0	1/0	1/0	7/1	4/3	5/0	12/6	0/0	9/3	3/1	11/10	3/0	0/0	0/0
9/3	COMP SCI	1/0	0/0	0/0	0/0	0/0	2/0	0/0	3/2	0/0	0/0	1/0	2/1	0/0	0/0	0/0
6/2	MATH/COMP SCI/NEC	2/1	0/0	0/0	0/0	1/0	0/0	2/1	0/0	0/0	1/0	0/0	0/0	0/0	0/0	0/0
	ENVIRON SCI															
5/0	GEOLOGICAL SCI	1/0	0/0	0/0	0/0	1/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	3/0	0/0	0/0
1/1	OCEANOGRAPHY	0/0	0/0	0/0	1/1	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
1/0	ATMOSPHERIC SCI	0/0	0/0	0/0	0/0	1/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
	ENGINEERING															
4/2	AERO ENG	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	2/1	1/1	1/0	0/0	0/0	0/0
1/0	AGRI ENG	0/0	0/0	1/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
13/1	CHIEF ENG	0/0	0/0	2/0	1/0	1/1	1/0	0/0	4/0	0/0	2/0	1/0	0/0	1/0	0/0	0/0
6/2	CIVIL ENG	1/1	0/0	0/0	0/0	0/0	0/0	3/1	1/0	0/0	0/0	0/0	1/0	0/0	0/0	0/0
31/12	ELECT ENG	4/2	2/1	1/0	4/1	1/0	7/2	0/0	6/2	0/0	2/1	3/2	1/1	0/0	0/0	0/0
8/2	INDUST ENG	0/0	0/0	0/0	0/0	0/0	0/0	4/0	0/0	0/0	3/1	0/0	1/1	0/0	0/0	0/0
42/13	MACH ENG	2/0	1/1	0/0	1/0	1/0	2/1	1/0	14/3	0/0	6/3	3/1	6/2	5/2	0/0	0/0
7/4	METALUR ENG	1/0	0/0	0/0	1/1	0/0	0/0	0/0	1/1	0/0	2/1	1/1	0/0	1/0	0/0	0/0
3/2	NUCLEAR ENG	0/0	0/0	0/0	0/0	0/0	0/0	1/0	0/0	0/0	0/0	1/1	1/1	0/0	0/0	0/0
8/4	ENG TECH	0/0	0/0	0/0	0/0	0/0	2/0	0/0	3/3	0/0	0/0	1/0	1/1	1/0	0/0	0/0
9/3	ENG NEC	1/0	0/0	0/0	1/0	0/0	0/0	2/0	4/2	0/0	1/1	0/0	0/0	0/0	0/0	0/0
	LIFE SCI															
18/3	BIOL SCI	0/0	2/0	7/0	0/0	1/0	1/1	4/1	1/1	0/0	1/0	0/0	0/0	1/0	0/0	0/0
8/4	MED SCI	0/0	3/2	4/2	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	1/0	0/0	0/0	0/0
17/4	LIFE SCI/NEC	0/0	3/1	7/1	0/0	1/0	0/0	2/0	0/0	0/0	1/0	0/0	0/0	1/0	1/1	1/1
33/13	PSYCHOLOGY	0/0	3/1	1/0	0/0	0/0	1/1	19/6	1/1	6/2	0/0	0/0	0/0	0/0	0/0	2/2
27/5	ALL OTHER DISCIPLINES	1/1	1/1	3/0	0/0	2/0	5/0	12/3	1/0	0/0	0/0	2/0	0/0	0/0	0/0	0/0
462/159	TOTALS	35/14	17/7	42/5	12/4	22/3	37/11	59/12	113/43	7/3	35/13	29/11	37/22	33/7	1/1	3/3

## AMERICAN SOCIETY FOR ENGINEERING EDUCAT

## Navy/ASEE Summer Faculty Research Programs

## Evaluation Questionnaire

(Faculty participants are asked to respond to the following questions)

Name: \_\_\_\_\_

Home institution: \_\_\_\_\_

Name of Research Colleague \_\_\_\_\_

Brief Descriptive Title of Research Topic: \_\_\_\_\_

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SUMMARY OF RESPONSES FROM 142 OF 159

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PARTICIPANTS IN 1985 NAVY SUMMER FACULTY RESEARCH PROGRAM

---

## A. Program Objectives

1. Do you feel that you were engaged effectively in research of importance to the mission of the laboratory and the Navy?

Very much so 119  
Somewhat 23  
Scarcely at all 0

2. As a result of your experience how likely are you to use it as a basis for continuing research of interest to the Navy at your institution under its or other sponsorship?

Very likely 91  
Likely 37  
Not likely 14

3. What is the level of your anticipation of maintaining relations with the professional peers with whom you collaborated in the laboratory this summer?

Eager, will maintain communication 129  
Willing, will respond 13  
Indifferent, not particularly interested 0

## B. Personal Professional Development

1. To what extent do you think your research interests and capabilities have been affected by this summer's experience? (You may check more than one.)

Reinvigorated 76  
Redirected 16  
Advanced 39  
Just maintained 1  
Unaffected 3

2. How strongly would you recommend this program to your faculty colleagues as a favorable means of advancing their personal professional development as researchers and teachers?

With enthusiasm 104  
 Positively 38  
 Without enthusiasm 0  
 Not at all 2

3. How will this experience affect your teaching in ways that will be valuable to your students? (You may check more than one.)

By integrating new information into courses 111  
 By starting new courses 25  
 By sharing research experience 107  
 By revealing opportunities for future employment in government agencies 97  
 By deepening your own grasp and enthusiasm 80  
 Will affect my teaching little, if at all 3

4. Do you have reason to believe that those in your institution who make decisions on promotion and tenure will give you credit for selection and participation in this highly competitive national program?

Yes 96

No 44

#### C. Administration

1. How did you learn about the program? (Please check appropriate response.)

69 Received announcement in mail.

14 Read about it in a professional publication.

41 Heard about it from colleague.

34 Other (Explain.) Poster, Department Mail, Center Employees

2. Did you also apply to other summer faculty programs?

21 DOE

51 NASA

21 Air Force

20 Army

28 No



3. Did you receive an offer of appointment from one or more of the above?  
Please indicate from which. DOE -2, NASA-11, AF-6, Army-2, Other -3

4. To what extent did you become familiar with the laboratory people and their research outside the research program in which you worked?

Mixed with and learned of the research of 41 many.

96 a few.

3 none.

5. Would you be willing to return next summer to continue research keeping in mind that the stipend is likely to be \$700 per week?

Yes 127

No 15

6. Did you receive any informal or formal instructions about submission of research proposals to continue your research at your home institution?

Yes 66

No 76

7. Did your assignment require a security clearance?

Yes 70

No 71

If "yes", did you actually receive a security clearance?

Yes 63

No 9

Did this requirement pose any obstacle to achieving your research goals for the summer? If yes, please explain.

Yes 9

No 85

Lack of security clearance prohibited publication of some research articles,  
difficulty with library access.

#### D. Stipend

Please indicate your annual stipend at your home institution. The purpose of this question is to determine an equitable stipend for next year's program.

\$ \_\_\_\_\_ /per \_\_\_\_\_

#### E. ASEE Membership Information

Would you like to receive information re. membership in ASEE?

Yes \_\_\_\_\_

No \_\_\_\_\_

PLEASE USE THIS PAGE FOR YOUR COMMENTS TO ANY QUESTION.

- No channel for follow-up or dispersion of research funds is established.
- Stipend too low- would be adequate if per diem were paid
- Rewarding professional experience
- Better means of obtaining living facilities should be implemented
- Program well organized- time spent efficiently
- Laboratory staff attitude cooperative and friendly
- Hope to continue work that has begun under ASEE program
- Mileage rate of .10 per mile inadequate- suggest .20 per mile
- Navy Administrators provided no encouragement for research proposals
- Project is of limited scope- not too much theoretical work is required
- Appears to be so much bureaucratic red tape- disappointing
- More information needed on the names, institutions, projects of other summer faculty
- Limited access to computer facilities
- More instruction needed for application for security clearance
- Best program that exists for educators
- Navy scientists supportive- should be commended
- Program conducted with efficiency and professionalism
- Would like to observe and mix with other research programs
- Allowance for family travel would be useful
- Those who make decisions on promotion have no respect for program
- ASEE staff very helpful
- Contact with Federal Agencies very useful
- Open ended starting dates terrific help.
- Navy staff not ready for me
- More planned social activities with other fellows
- Stipend should be leveled according to academic salary level
- Program fantastic

NINE MONTHS SALARY		NINE MONTHS SALARY	
\$12,750.00	1	\$36,000.00	2
\$15,750.00	2	\$36,400.00	2
\$16,125.00	1	\$36,750.00	1
\$17,250.00	2	\$37,000.00	1
\$17,550.00	1	\$37,500.00	4
\$18,000.00	2	\$37,700.00	1
\$18,374.00	1	\$38,000.00	3
\$18,750.00	1	\$38,286.00	1
\$19,500.00	2	\$38,500.00	1
\$20,000.00	2	\$39,000.00	2
\$21,600.00	1	\$40,000.00	2
\$21,750.00	1	\$41,000.00	1
\$22,000.00	1	\$41,250.00	1
\$22,124.00	1	\$41,500.00	1
\$22,500.00	2	\$42,000.00	3
\$23,250.00	3	\$42,543.00	1
\$23,500.00	2	\$44,000.00	3
\$24,000.00	4	\$44,550.00	1
\$24,300.00	1	\$45,000.00	2
\$25,200.00	2	\$47,700.00	1
\$25,500.00	3	\$48,150.00	1
\$26,000.00	1	\$53,000.00	3
\$26,250.00	3	\$54,900.00	1
\$26,500.00	2	\$60,000.00	1
\$27,000.00	3		
\$27,900.00	1		
\$28,000.00	1		
\$28,350.00	2		
\$28,500.00	1		
\$28,800.00	4	AVERAGE 9 MONTH SALARY	\$31,509.38
\$29,000.00	1	MEDIAN 9 MONTH SALARY	\$30,600.00
\$29,700.00	4		
\$30,000.00	7		
\$30,375.00	4		
\$30,600.00	2		
\$31,000.00	4		
\$31,500.00	3		
\$31,650.00	1		
\$32,000.00	4		
\$32,600.00	1		
\$33,000.00	1		
\$33,120.00	1		
\$33,500.00	1		
\$33,800.00	1		
\$34,000.00	2		
\$34,200.00	2		
\$35,000.00	3		
\$35,250.00	2		
\$35,400.00	2		
\$35,800.00	1		



**American Society for  
Engineering Education**  
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(202) 293-7080

Summer Faculty Programs Committee  
Minutes of Meeting  
Thursday, October 10, 1985  
Quality Inn Airport - Room 301  
Cleveland, Ohio

Present:	E. R. Brown, Chairman	E. Hildreth, Jr.
	D. Frederick	R. C. Jones
	M. E. Childs	M. A. Wechter
	C. O. Harbourt	J. Lisack, Jr.,
		Ex Officio

Absent: C. J. Tompkins, Ex Officio

Guests: J. Counts, NASA Headquarters  
F. Owens, NASA Headquarters  
R. Ryan, ONR Headquarters  
R. Sternberg, ONR Headquarters

The meeting was called to order at 1:59 p.m. by Chairman Brown.

1. Introductions and welcome:  
Chairman Brown welcomed everyone and asked each person to introduce themselves.
2. Approval of minutes:  
The minutes of the September 17, 1984 meeting were approved as submitted.
3. Reports on 1985 programs:
  - A. Department of Energy (Passive Solar Research Program)  
J. Lisack reported that due to financial constraints the Department of Energy would not be funding a summer faculty research program during 1986.  
See Attachment A.
  - B. NASA - Summer Faculty Program
    1. Agency report-  
Frank Owens reported that NASA Headquarters has been reorganized and that Dr. Graham, Deputy Administrator of NASA (an electrical engineer), is very interested in NASA's educational efforts. Specific areas include 1.) University Programs; 2.) Elementary School Programs; 3.) Educational Publications. Information feedback systems are considered very important and the

special evaluation studies and committee reports that ASEE has conducted in the past will prove very valuable. Attachment B. was distributed by F. Owens and contains pertinent data about the NASA program.

F. Owens called upon Dr. G. Soffen to report on the program at Goddard, where one year ago several deficiencies were identified. Attachment C. is an outline of his presentation. D. Frederick, who was a member of the evaluation team, was very impressed with the actions taken and the beneficial results. Dr. Soffen made the following personal observations--

The participating faculty are: enthusiastic; naive; representative of student's point of view; from small schools; space "nuts."

He would like to attract more young faculty from major universities. Generally he felt the ratio of scientists to engineers was too high and that the stipend was too low to attract really top notch engineers. His opinion was that the program is successful because of the opportunity for involvement in the space program and investigate future grant/contract potential.

2. ASEE report-

It was reported that the program is very successful from ASEE's perspective. A new computer data base was described and samples of the type of information that can be generated were distributed as Attachment D. Questions that were asked based on the charts included: Why are there so few minority awards based on the relatively high number of applications? The number of women appears low and it was suggested that appeals be made to women's colleges. The utilization of the computerized data base was commended by the committee.

C. ONR - Summer Faculty Program

1. Agency report-

R. Sternberg and R. Ryan reported on the program. The following comments highlighted their presentation.

\*ONR is interested in exploring new alternatives to further enhance the quality of the program.

\*The highest participation exists at larger labs where higher basic research budgets exist.

\*The labs are supporting more and more appointments - 200 total appointments are projected for 1986.

\*The stipend level is too low to attract more experienced, senior engineers.

\*The average age of the participating faculty has increased over the years.

\*Navy would like more prestigious universities represented.

\*The 1987 program will have to be competed (i.e., ASEE may not receive the 1987 contract).

It was reported that ONR will initiate a three-tiered stipend for faculty participants during 1986 in an effort to attract a few more experienced researchers from larger research oriented universities. Though it was recognized that the current program is very successful, the potential to further improve is the motivation for these changes. It was acknowledged that criteria for the tiered system has been developed and this would increase the administrative burden for the Navy. NASA asked to be informed about such changes in the ONR program as soon as possible so the adequate consideration, planning and budgeting could be given to their program.

Based on the above, the committee voted unanimously:  
To support in theory the three tiered stipend program and review its effectiveness at next year's meeting.

D. Laboratory visits:

It was reported that visits were made by J. Lisack to Ames Research Center, Naval Ocean Systems Center, Naval Personnel Research & Development Center and the Naval Underwater Systems Center. Dr. M. Gilkeson, ASEE Assistant Executive Director, visited the Naval Underwater Systems Centers at Newport and New London. Committee member visits were not conducted during 1985 because of time and financial constraints.

4. Items for discussion for the 1986 Program:

A. Goals and objectives of each agency

1. NASA - Kennedy Space Center

F. Owens reported that four (4) faculty appointments were made during 1985 and it is expected to double to eight (8) during 1986. The program is currently being administered through the University of Alabama-Huntsville but the committee was requested to recommend another university to work with Kennedy.

2. NASA - National Space Technology Lab  
F. Owens requested Dr. Joyce to report on the NSTL.  
Dr. Joyce's presentation is highlighted in Attachment  
F. F. Owens asked the committee to approve placing  
three (3) or four (4) faculty members at NSTL.  
The committee voted unanimously:  
To approve the addition of the National Space  
Technology Lab as part of the Summer Faculty  
Program.

3. ONR  
It was reported that operational restructuring will  
enable laboratories to fund university research  
directly.\*

B. Participant support

1. Stipends - already discussed under item 3.C.1. of this  
report.
2. Relocation allocation - J. Lisack alerted the  
committee that special relocation cost considerations  
will be included as part of participants' compensation  
in the Navy program and per diem may be considered in  
the future. (Navy is exploring this possibility).
3. Mini grants/contracts - It was mentioned that mini  
grants/contracts should be considered as an  
alternative to repeat summer appointments beyond 2/3  
summers.

C. Computerized data system:

ASEE was encouraged to use and expand the data base to  
provide pertinent data in analyzing the effectiveness of  
the program.

D. Timely notification of faculty selections:

It was the consensus of the committee that written  
notification, possibly a telegram, be used to notify all  
selected faculty in addition to the telephone  
notification.

E. Laboratory/Center visits:

The following laboratories will be visited by the  
committee members listed.

Jet Propulsion Lab:

F. Brown  
E. Hildreth  
(Project Board member to be designated)

Marshall Space Flight Center:

C. Harbourt  
M. Wechter  
(Project Board member to be designated)

\*As of June, 1986, this restructuring had been changed  
again.

Johnson Space Center:

R. Jones

D. Fredericks

(Project Board member to be designated)

C. Carter will coordinate these visits.

F. Special reports and program analysis:

A brief statement was made that ASEE has conducted various evaluations of programs in the past and that similar studies can be conducted in the future.

G. Timely announcement distribution by labs:

J. Lisack requested that lab personnel who want particular faculty to conduct research at their labs distribute the applications early and encourage faculty to return completed applications before the deadline.

5. Next meeting:

The ONR has invited the committee to meet next fall at a Navy facility. This possibility will be explored.

5. Adjournment:

The meeting was adjourned at 5:20 p.m.





**American Society for  
Engineering Education**

**suite 200**

**eleven dupont circle, washington, d.c. 20036**

May 16, 1985

(202) 293-7080

**1985-86 SUMMER FACULTY PROGRAMS COMMITTEE**

Ernest R. Brown (1987) Retired -- Chairman (1986)

Morris F. Childs (1987) University of Washington  
Daniel Frederick (1987) Virginia Polytechnic Institute and State University  
Cyrus O. Harbout (1987) University of Missouri  
Russel C. Jones (1987) Boston University  
Edward Hildreth (1988) Southern University  
Margaret A. Wechter (1988) Southeastern Massachusetts University

Ex Officio:

Vice President Public Affairs -- Curt J. Tompkins  
ASEE Headquarters -- John Lisack, Jr. ✓

FROM: W. Edward Lear, Executive Director *WEL*

On behalf of President-Elect Robert N. Mills I invite you to serve as members of the above named committee with terms for new members beginning during the 1985 Annual Conference and terms for all expiring in June of the year listed after your name. It is expected the committee will plan its 1985-86 effort during its annual proposal evaluation meeting in September. This committee is a standing Society committee reporting to the Board of Directors through the Vice President, Public Affairs, who also serves as chairman of the Projects Board.

The mission of this committee is the maintenance of appropriate liaison with the National Aeronautics and Space Administration and all other agencies, public or private, for developing summer programs for engineering faculty, either in appropriate subject matter, research, or design. Because of the impact of the NASA/ASEE summer faculty fellowship programs on engineering education and the momentum developed by these programs for the support and development of engineering research and engineering systems design, the committee should consider building a broader base of operations with additional federal agencies. Special consideration should be given to the utilization of NASA-developed approaches to areas which are growing under the cognizance of NSF, DOE, ONR, EO, NIH and DOT.

Each Society committee is expected to submit an annual report by May 1, 1986, and other reports as required by business to be accomplished. To ensure continuity, the outgoing chairman should transfer to the incoming chairman the committee file of pertinent reports, correspondence, etc.

END

DATE  
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